

ABSTRACT OF THE DISCLOSURE

A method for manufacturing thin film transistor panels in order to obviate the lowstability of conventional laser annealing processes, and the resultant low quality of the produced polycrystal silicon thin film. According to the method of the invention, form a transparent insulator on the front surface of a silicon substrate. Form a thin film transistor structure and transparent electrode on the upper surface of the transparent insulator. Bond a transparent substrate onto the front surface of the silicon substrate. After that, remove a portion of the silicon substrate by polishing or etching the back of the silicon substrate to obtained a transparent thin film transistor panel. The transparent electrode can also be formed on the bottom surface of the transparent insulator. Also, the transparent substrate can be bonded onto the back of the silicon substrate. Then reduce the thickness of the silicon substrate to generate a crystal silicon thin film. Form a thin film transistor structure layer and the transparent electrode required by the thin film transistor panel on the crystal silicon thin film.